

**Amendments to the Drawings:**

The Examiner objected to the drawings under 37 CFR 1.83(a) because they fail to show the subject matter in regards to Figures 5-10

The attached sheets of drawings include changes to Figs. 5-10. These sheets replace the original sheets including Figs. 5-10 and include element numbers to refer to the subject matter described in the originally filed specification and drawings. Applicant has amended the specification to add the element numbers as appropriate.

As the above-identified drawings are presented in color, applicants also transmit herewith a PETITION FOR ACCEPTANCE OF COLORED DRAWINGS along with the required fee.

**REMARKS**

Claims 1-55 are pending in the present application.

Claims 4 and 5 were objected to by the Examiner because of the statement "...with by using...." Applicants have amended claims 4 and 5 to present them in correct grammatical form.

**Rejections Under 35 USC § 112**

The Examiner has rejected claims 8-19 and 54 under 35 U.S.C. 112, second paragraph, as being indefinite due to the term " $F(x, n, \phi)$ ...". Applicant has amended claim 8 accordingly.

**Rejections Under 35 USC § 101**

The Examiner has rejected claims 1-55 under 35 U.S.C. 101 because the claimed invention is directed to non-statutory matter. Applicant respectfully disagrees.

Applicant has amended claim 1 to show that there is a change or result in a level set having at least one deformation thereon where the tangible result is that the at least one deformation is modified by the editing operation.

**Rejections Under 35 USC § 102**

The Examiner has rejected claims 1-3, 5, 45, 46, 48 and 51-53 under 35 U.S.C. § 102(b) as being anticipated by Whitaker et al. The Examiner states that Whitaker describes a method for editing a geometrical model with a level set modeling surface operator in the abstract lines 1-8...also describes performing a level set surface editing operation on a level set model, where the operation is defined by a level surface editing operator. Applicant respectfully disagrees.

Whitaker is directed to deriving a level set surface based on a volumetric dataset. There is no teaching, description, or suggestion in Whitaker of editing the surface once it is derived. The section referred to by the Examiner relate only to manipulations that occur in the derivation itself, and not to an editing operation on the derived surface. For example, in Section 3, second paragraph of Whitaker, it states: "...the level set formulation provides a set of numerical methods that describes how to manipulate the greyscale values in a volume, so that the

isosurfaces ...move in a prescribed manner...". This makes clear that the "editing" if any, is done at the derivation (volume) stage to result in a surface, and not to edit a derived surface.

Similarly, Section 4.2 discusses actions to take during the derivation process from volume to surface, and not to manipulation of the surface by an editing operation.

Further, the Whitaker reference refers to the issues in dealing with maintaining edges (see section 4.2) whereas the claimed invention is free of edge terms during the editing operation.

### **Rejections Under 35 USC § 103**

The Examiner has rejected claims 4, 6 and 20-22 under 35 U.S.C. 103(a) as being unpatentable over Whitaker in view of Breen et al.

All dependent claims, being dependent on allowable base independent claim 1, are themselves allowable.

In view of the above amendments and remarks, applicants respectfully request that this application be reexamined and that the claims, as amended, be allowed.

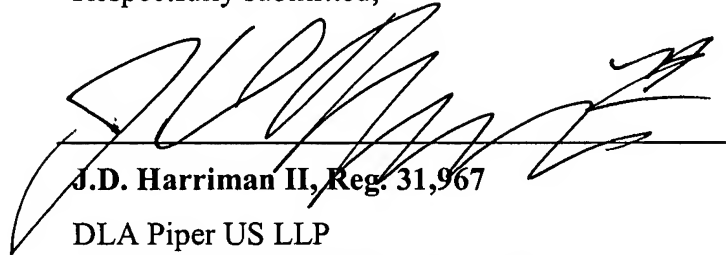
Applicants file concurrently herewith a request for a three-month extension of time to extend the due date to reply to the outstanding OFFICE ACTION until April 5, 2007, along with the required fee.

Applicants also file concurrently herewith a PETITION FOR ACCEPTANCE OF COLORED DRAWINGS, along with three sets of the colored drawings (FIGS. 4-10) and the required petition fee.

Please charge any deficiency in fees that may be due for the filing of this AMENDMENT or credit any overpayments to Deposit Account No. 07-1896.

Respectfully submitted,

Dated: April 5, 2007

A large, stylized handwritten signature in black ink, likely belonging to J.D. Harriman II, is written over a horizontal line.

**J.D. Harriman II, Reg. 31,967**

DLA Piper US LLP  
1999 Avenue of the Stars, Suite 400  
Los Angeles, California 90067-6023  
Tel: (310) 595-3000  
Fax: (310) 595-3300